June 16, 1972

In December 1947, the President approved the use of Eniwetok, a central Pacific atoll, as one of two Pacific nuclear test sites. The Eniwetok tests began in April 1948 followed by tests in 1951, 1952, 1954, 1956 and 1958. There were 43 nuclear detonations, of which 35 were announced publicly.

Currently the Defense Nuclear Agency is preparing a series of high explosive cratering experiments on several islands in the atoll. This program, known as PACE, is part of a series of experiments designed to provide blast and shock environmental data, for assessing and upgrading the hardness of strategic systems. In 1971, at the request of the Air Force (PACE) staff, AEC conducted radiological surveys of the islands that were to be used for the PACE experi-The surveys identified plutonium contamination on Runit Island where some PACE shots are scheduled. was further confirmed by another AEC survey in April 1972. Studies of the records of test operations showed that this resulted from the detonation of two safety related shots that scattered kilogram amounts of plutonium on the island. The exact area and extent of contamination has not been fully determined. Subsequent earth and debris moving activities have spread and mixed the contaminated soil through much of the island. A piece of bomb material weighing about 700 mg and containing 40 mg of plutonium was collected and analyzed. The AEC and Defense Nuclear Agency are evaluating the results of the radiological survey with respect to conducting the PACE experiments as planned, with appropriate precaution, or whether another site will need to be selected.

In April 1972, Interior and Trust Territory jointly announced that Eniwetok would be returned to the Trust Territory at the end of 1973. An extensive radiological survey is planned for this fall to determine the feasibility and/or extent of the cleanup required for rehabilitation of the islands. In addition to the radiological problem, which also includes burial grounds containing

DEFACTMENT OF THE PROPERTY OF

This document dains Restricted Date
as defined in the Atomic Energy Act of
1984, Incressemination or disclosure to ear
1984, processemination or disclosur

005594

CJ

## CONFIDENTIAL

- 2 -

plutonium contaminated waste, there is a considerable amount of World War II debris and debris from the nuclear test program, much of which is also contaminated with radioactivity. Rehabilitation of Eniwetok in a manner similar to that conducted at Bikini will require removal of all scrap and the burial grounds and removal and replacement of plutonium contaminated soil.

## Additional Background Information

Eniwetok atoll consists of 42 islands surrounding a lagoon 25 miles long by 20 miles wide. The total land area is 226 square miles. In February of 1944, the atoll was taken by United States forces. One of the islands in the atoll (Engebi) was reported to be the most heavily bombarded area in the Pacific. The United States was granted UN trusteeship at the end of World War II. Certain islands including Eniwetok were reserved for military use and were not placed under Trust Territory jurisdiction and present access to the atoll is under U. S. Navy control. In 1946, the 136 Eniwetokese were resettled in Ujelanj atoll 150 miles to the southeast. Since 1958, following the nuclear test moratorium, Eniwetok was an impact and scoring area for ICBM's launched from Vandenberg AFB. The atoll has not been used as an impact area since 1969. Two beryllium fuel rocket engine tests were conducted on the island of Engebi in 1966 and 1969.

NMB 53

